

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	48260	((spin adj bulb) or mr or mre or DOMR or magneto adj resist\$5 or magnetoresist\$5 or amr or magnetic\$4 adj resist\$5 or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or g11b005/39.ipc. or g11b005/33.ipc or g11b005/127.ipc or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5 or piggyback or ((composite or combination or merged) adj4 head\$1))	EPO; JPO; DERWENT	OR	OFF	2006/06/09 17:15
L2	613384	dual near\$2 spin near2 valve\$1	EPO; JPO; DERWENT	OR	OFF	2006/06/09 17:51
L3	78	dual near2 spin near2 valve\$1	EPO; JPO; DERWENT	OR	OFF	2006/06/09 17:16
L4	78	1 and 3	EPO; JPO; DERWENT	OR	OFF	2006/06/09 17:16
L5	1088962	CPP or current or c adj p adj p or c-p-p	EPO; JPO; DERWENT	OR	OFF	2006/06/09 17:52
L6	42	4 and 5	EPO; JPO; DERWENT	OR	OFF	2006/06/09 17:51
L7	24561	(mr or DOMR or mre or magneto adj (resistiv\$3 or resistance\$1) or magnetoresist\$5 or amr or magnetic\$4 adj (resistiv\$3 or resistance\$1) or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or DSV or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5 or piggyback or ((composite or combination or merged) adj4 head\$1)).ti,ab,clm. or "360/113" or 360/313-327.33.ccls. or 338/32\$2.ccls. or 324/207.21.ccls. or 324/252.ccls. or 365/171.ccls. or 365/173.ccls. or 428/811-811.5.ccls. or 148/108.ccls.	US-PGPUB; USPAT	OR	OFF	2006/06/09 18:05
L8	1557317	dual near\$2 spin near2 valve\$1	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:52
L9	1527433	CPP or current or c adj p adj p or c-p-p	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:52
L10	598	dual near2 spin near2 valve\$1	US-PGPUB; USPAT	OR	OFF	2006/06/09 18:05

## EAST Search History

L11	564	7 and 9 and 10	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:53
L12	138846	ruthenium or Ru or ferrimagnetic\$5 or ferri adj2 magnetic\$5 or antiparallel or anti adj parallel or ((antiferromagnetic or AFM or anti adj ferromagnetic\$5) adj2 coupling\$1) or APC or AAF or SAF or synthetic\$4 adj2 (antiferromagnet\$5 or anti adj ferromagnet\$5 coupling) or artificial adj2 (anti adj ferromagnet\$5 or antiferromagnet\$5) or MSSV or SSV or AP1 or AP2 or APC1 or APC2 or AFC or ((reference or keeper) near2 layer\$1)	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:54
L13	533	11 and 12	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:53
L14	1711142	pinned or pinning or fixing or fixed	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:54
L15	522	13 and 14	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:55
L16	8784	((conduction or majority or minority) near4 electrons)	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:56
L17	269	15 and 16	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:56
L18	174	@ad<="20020828" and 17	US-PGPUB; USPAT	OR	OFF	2006/06/09 17:56
L19	778	(mr or DOMR or mre or magneto adj (resistiv\$3 or resistance\$1) or magnetoresist\$5 or amr or magnetic\$4 adj (resistiv\$3 or resistance\$1) or gmr\$1 or spin adj valve\$1 or svmr\$1 or tjmr\$1 or tmj\$1 or tmr or mram or magnetic adj memory or magnetic adj random adj access adj memory or DSV or TJM or macro adj magnetoresist\$5 or macromagnetoresist\$5 or piggyback or ((composite or combination or merged) adj4 head\$1))	IBM_TDB	OR	OFF	2006/06/09 18:05
L20	1	dual near2 spin near2 valve\$1	IBM_TDB	OR	OFF	2006/06/09 18:05